

## ABSTRACT OF THE DISCLOSURE

A method of producing a glass particle-deposited body having a reduced amount of longitudinal diameter fluctuations with few imperfect points. The method comprises the steps of (a) synthesizing glass particles with at least one  
5 burner and (b) moving the at least one burner, a starting material, or both so that the glass particles can adhere onto the surface of the starting material to be deposited there. Two types of vertical spaces in a reaction container are defined; one is the space in which the at least one burner, the starting material's surface onto which the glass particles are to adhere, or both move,  
10 and the other is the space enclosed by (a) the position of the at least one burner, (b) the position at which the extended center axis of the at least one burner intersects the opposite wall of the reaction container, and (c) the position of the at least one gas-discharging port. In both spaces, the container's internal pressure at the uppermost position is higher than the container's internal  
15 pressure at the lowermost position.